

LISTING OF CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently amended) A method for communicating between a first communication endpoint coupled to an R_m interface and a second communication endpoint coupled to a network, the method comprising:

a. receiving a provisioning request for a resource by a mobile station manager from one of the first communication endpoint and the second communication endpoint;

b. provisioning the resource for the connected entity in response to the provisioning request,

wherein the resource uniquely identifies the first communication endpoint on the communication network;

c. establishing a predetermined communication state between the first communication endpoint and the second communication endpoint through the mobile ~~system~~ station manager in response to the provisioning request,

wherein the first communication endpoint communicates messages over the R_m interface with the mobile ~~system~~ station manager as TE2-type signals; and

wherein the second communication endpoint communicates messages with the mobile ~~system~~ station manager as network protocol signals; and

d. adapting the communicated messages between TE2-type signals and network protocol signals.

2. (Original) The method of Claim 1, further comprising adapting messages for communication between the mobile station manager and the first communication endpoint over an R_m interface using one of an asynchronous, a synchronous, an isochronous, and a variable-rate physical interface protocol, wherein the messages are communicated across one of a wired physical interface and a wireless physical interface, and wherein the R_m interface is substantially ISDN-incompatible physical interface.

3. (Original) The method of Claim 1, further comprising adapting messages for communication between the mobile station manager and the second communication endpoint over an U_m interface using one of a CDMA carrier access method, a TDMA carrier access method, a FDMA carrier access method, and an operable combination thereof.

4. (Original) The method of Claim 2, further comprising adapting messages for communication between the mobile station manager and the second communication endpoint over an U_m interface using one of a CDMA carrier access method, a TDMA carrier access method, a FDMA carrier access method, and an operable combination thereof.

5-36. (Withdrawn)

37. (Currently amended) A method for communicating across a network with a remote host, the method comprising:

a. receiving a provisioning request for a resource by a mobile station manager coupled to at least one mobile terminal, wherein the at least one mobile terminal

communicates messages as TE2-type signals through a respective R_m interface with the mobile ~~system~~ station manager;

b. provisioning the resource in response to the provisioning request, wherein the resource uniquely identifies the at least one mobile terminal relative to the communication network;

c. establishing a predetermined communication state between the mobile station manager and a selected available communication network using a selected wireless communication protocol over a selected carrier access method; and

d. establishing a predetermined communication state between the at least mobile terminal and the remote host through the mobile ~~system~~ station manager in response to the provisioning request, wherein the remote host communicates messages with the mobile ~~system~~ station manager as network protocol signals; and

e. adapting the communicated messages between TE2-type signals and network protocol signals.

38. (Original) The method of Claim 37, further comprising adapting messages for communication between the mobile station manager and the at least one mobile terminal over an R_m interface using one of an asynchronous, a synchronous, an isochronous, and a variable-rate physical interface protocol, wherein the messages are communicated across one of a wired physical interface and a wireless physical interface, and wherein the R_m interface is a substantially ISDN-incompatible physical interface.

39. (Original) The method of Claim 38, further comprising adapting messages for communication between the mobile station manager and the second communication endpoint

over an U_m interface using one of a CDMA carrier access method, a TDMA carrier access method, a FDMA carrier access method, and an operable combination thereof.

40. (Original) The method of Claim 39, wherein the provisioning request comprises one of an ALLOCATE request, a RELEASE request, a REVOKE request, an UPDATE request, and a combination thereof.

41-52. (Withdrawn)

53. (Original) A mobile station for communicating with a mobile service provider across a U_m interface, comprising:

a. a mobile terminal coupled to, and configured to communicate messages across, an R_m interface, using a selected configuration; and

b. a wireless communication device coupled between the R_m interface and the U_m interface,

wherein the wireless communication device provides the selected configuration to the mobile terminal,

wherein the wireless communication device cooperates with the mobile terminal to configure the mobile terminal to communicate the messages across the R_m interface, and

wherein the wireless communication device is adapted to communicate the messages with the mobile service provider across the U_m interface.

54. (Original) The mobile station of Claim 53, further comprising mobile terminals coupled to, and configured to communicate messages across, the R_m interface, each mobile terminal using a respective selected configuration;

wherein the wireless communication device provides the respective selected configuration to each mobile terminal,

wherein the wireless communication device cooperates with the mobile terminals to configure the mobile terminals to communicate messages from the mobile terminals across the R_m interface, and

wherein the wireless communication device is adapted to communicate the messages from the mobile terminals with the mobile service provider across the U_m interface.

55. (Original) The mobile station of Claim 54, further comprising mobile terminals coupled to, and configured to communicate messages across, predetermined R_m interfaces, each mobile terminal using a respective selected configuration to communicate respective messages across a respective selected one of the predetermined R_m interfaces;

wherein the wireless communication device provides the respective selected configuration to each mobile terminal,

wherein the wireless communication device cooperates with the mobile terminals to configure the mobile terminals to communicate messages from the mobile terminals across the respective selected one of the predetermined R_m interfaces, and

wherein the wireless communication device is adapted to communicate the messages from the mobile terminals with the mobile service provider across the U_m interface.

56. (Original) The mobile station of Claim 55, wherein the wireless communication device is adapted to communicate with mobile service providers across U_m interfaces, is adapted to communicate the messages from a selected one of the mobile terminals with a selected one of the mobile service providers across a respective one of the U_m interfaces.

57. (Original) The mobile station of Claim 55, wherein the U_m interface is representative of a carrier access method comprising one of a digital carrier access method, an analog carrier access method, and an operable combination thereof.

58. (Original) The mobile station of Claim 57, wherein the carrier access method further comprises one of a CDMA carrier access method, a TDMA carrier access method, a FDMA carrier access method, and an operable combination thereof.

59. (Original) The mobile station of Claim 58, wherein the carrier access method is a carrier access method conforming at least in part to International Telecommunications Union (Radio) Recommendation ITU-R M.1457.

60. (Original) The mobile station of Claim 58, wherein a first U_m interface is representative of a first carrier access method, and a second U_m interface is representative of a second carrier access method, and wherein the first carrier access method is different from the second carrier access method.

61. (Original) The mobile station of Claim 58, wherein a first U_m interface is representative of a first carrier access method, wherein a second U_m interface is representative of a second carrier access method, wherein the first carrier access method is different from the second carrier access method, and wherein one of the first and second carrier access method conforms at least in part to International Telecommunications Union (Radio) Recommendation ITU-R M.1457.

62. (Original) A mobile station communicating with a communication network over a wireless communication link, comprising:

a. a managed device having a selected network configuration, the managed device communicating messages of TE2-type physical layer signals; and

b. a mobile station manager communicatively coupled between the wireless communication link and the managed device, and adapted to render TE2-type physical layer signals suitable for exchanging with the communication network over the wireless communication link,

wherein the mobile station manager dynamically provisions a selected network configuration on behalf of the managed device and cooperates to apply the selected network configuration to the managed device, the selected network configuration rendering the managed device capable of communicating the messages over the communication network.

63. (Original) The mobile station of Claim 62, wherein the mobile station manager further comprises:

a. a device-related interface connected with the managed device, and adapted to transform the messages of TE2-type physical layer signals over the R_m interface into messages conforming to a network protocol;

b. a network protocol interface connected with the wireless communication, and adapted to transform the messages conforming to the network protocol into messages suitable for communicating with the communication network over the U_m interface; and

c. a mobile configuration manager adapted to manage the managed device and to communicate the messages conforming to the network protocol between the device-related interface and the network protocol interface.

64. (Original) The mobile station of Claim 63, wherein the managed device comprises a non-ISDN compatible mobile terminal.

65. (Original) The mobile station of Claim 63, wherein TE2-type physical layer signals comprise signals conforming at least in part to one of an ITU Recommendation, an IEEE standard, an ISO standard, an ANSI standard, an IETF standard, an EIA standard, a TIA standard, an IEC standard, an ETSI standard, an AIAA standard, an ARINC standard, a SAE standard, a serial interface standard, a parallel interface standard, and an interface standard representative of a selective combination thereof.

66. (Original) The mobile station of Claim 63, wherein the U_m interface is representative of a carrier access method, and the carrier access method comprises one of a digital carrier access method, an analog carrier access method, and an operable combination thereof.

67. (Original) The mobile station of Claim 66, wherein the carrier access method further comprises one of a CDMA carrier access method, a TDMA carrier access method, a FDMA carrier access method, and an operable combination thereof.

68. (Original) The mobile station of Claim 67, wherein the carrier access method is a carrier access method conforming at least in part to International Telecommunications Union (Radio) Recommendation ITU-R M.1457.

69. (Original) The mobile station of Claim 63, wherein the mobile configuration manager is adapted to communicate over first and second U_m interfaces using respective first and second network protocol interfaces; wherein a first U_m interface is representative of a first carrier access method, and a second U_m interface is representative of a second carrier access method.

70. (Original) The mobile station of Claim 69, wherein the mobile configuration manager is adapted to communicate over first and second R_m interfaces using respective first and second device related interfaces; and wherein the first R_m interface is connected with a first managed device, and the second R_m interface is connected with a first managed device.

71. (Original) The mobile station of Claim 63, wherein the mobile configuration manager selects between the first network protocol interface for communicating across the first U_m interface using the first carrier access method and the second network protocol

interface for communicating across the second U_m interface using the the second carrier access method, responsive to a Quality-of-Service input signal.

72. (Original) The mobile station of Claim 71, wherein the managed device is a non-ISDN compatible mobile terminal and wherein TE2-type physical layer signals communicated across the R_m interface comprise signals conforming at least in part to one of an ITU Recommendation, an IEEE standard, an ISO standard, an ANSI standard, an IETF standard, an EIA standard, a TIA standard, an IEC standard, an ETSI standard, an AIAA standard, an ARINC standard, a SAE standard, a serial interface standard, a parallel interface standard, and an interface standard representative of a selected combination thereof.

73. (Original) The mobile station of Claim 72, wherein each of the U_m interfaces is representative of a carrier access method, and the carrier access method comprises one of a digital carrier access method, an analog carrier access method, and an operable combination thereof, and wherein the carrier access method further comprises one of a CDMA carrier access method, a TDMA carrier access method, a FDMA carrier access method, and an operable combination thereof.

74. (Original) The mobile station of Claim 73, wherein the carrier access method comprises a carrier access method conforming at least in part to International Telecommunications Union (Radio) Recommendation ITU-R M.1457.

75. (Original) A mobile communication device, comprising:

a. an interface configured as a device-related interface (DRIF), the DRIF being connectable to a managed device communicating with a first physical signal format, and configured to adapt messages communicated with the managed device between the first physical format and a network communication format;

b. an interface configured as a network protocol interface (NPIF), the NPIF being connectable to a communication network communicating with a second physical signal format, and configured to adapt messages communicated with the communication network between the network communication format and a second physical format; and

c. a mobile configuration manager coupled between the DRIF and the NPIF,

wherein the mobile configuration manager receives a provisioning resource request in the network communication format from one of the DRIF and the NPIF,

wherein the provisioning resource request includes selected combinations of an ALLOCATE request, a RELEASE request, a REVOKE request, and an UPDATE request, and

wherein the mobile configuration manager provisions the resource in response thereto, such that the resource uniquely identifies the managed device on the communication network.

76. (Original) The mobile communication device of Claim 75, wherein the the managed device exchanges messages with DRIF over an R_m interface using a first physical signal format comprising ISDN-incompatible, TE2-type physical layer signals conforming at least in part to one of an ITU Recommendation, an IEEE standard, an ISO standard, an ANSI standard, an IETF standard, an EIA standard, a TIA standard, an IEC standard, an ETSI

standard, an AIAA standard, an ARINC standard, a SAE standard, a serial interface standard, a parallel interface standard, and an interface standard representative of a selected combination thereof.

77. (Original) The mobile communication device of Claim 76, wherein the NPIF exchanges messages over a U_m interface in the second physical signal format representative of a carrier access method, and the carrier access method comprises one of a digital carrier access method, an analog carrier access method, and an operable combination thereof, and wherein the carrier access method further comprises one of a CDMA carrier access method, a TDMA carrier access method, a FDMA carrier access method, and an operable combination thereof.

78. (Original) The mobile communication device of Claim 77, wherein the carrier access method comprises a carrier access method conforming at least in part to International Telecommunications Union (Radio) Recommendation ITU-R M.1457.

79. (Original) A portable communication adaptor coupled between a TE2 communication terminal and a communication network, wherein the TE2 communication terminal exchanges messages with a remote host over the communication network, the adaptor comprising:

- a. an first interface coupled with the TE2 communication terminal;
- b. a second interface coupled with the communication network;
- c. an address server linked to the first interface and the second interface,

wherein the address server cooperates with the second interface to exchange the messages with the communication network,

wherein the address server acts on a unique resource to the TE2 communication terminal,

wherein the address server cooperates with the first interface to configure the TE2 communication terminal with the unique resource,

wherein the address server cooperates with the first interface to compel the TE2 communication terminal to respond as a local host relative to the remote host,

wherein the address server cooperates with the first interface to exchange messages with the TE2 communication terminal, and

wherein the address server causes the portable communication adaptor to respond substantially as a communication router.

80. (Original) The portable communication adaptor of Claim 79, wherein the address server acts on the unique resource by transmitting to at least one of the first interface and the second interface a provisioning signal including one of an ALLOCATE provisioning signal, a RELEASE provisioning signal, a REVOKE provisioning signal, an UPDATE provisioning signal, and a selected combination thereof.

81. (Original) The portable communication adaptor of Claim 80, wherein the TE2 communication terminal exchanges the messages with the first interface through an R_m interface using a TE2-type physical layer signal format conforming at least in part to one of an ITU Recommendation, an IEEE standard, an ISO standard, an ANSI standard, an IETF standard, an EIA standard, a TIA standard, an IEC standard, an ETSI standard, an AIAA

standard, an ARINC standard, a SAE standard, a serial interface standard, a parallel interface standard, and an interface standard representative of a selected combination thereof.

82. (Original) The portable communication adaptor of Claim 81, wherein the second interface exchanges the messages with the communication network through a U_m interface using a carrier access method, and the carrier access method comprises at least one of a digital carrier access method, an analog carrier access method, and an operable combination thereof, and wherein the carrier access method further comprises one of a CDMA carrier access method, a TDMA carrier access method, a FDMA carrier access method, and an operable combination thereof.

83. (Original) The mobile communication device of Claim 82, wherein the carrier access method comprises a carrier access method conforming at least in part to International Telecommunications Union (Radio) Recommendation ITU-R M.1457.

84. (Original) The portable communication adaptor of Claim 82, further comprising multiple first interfaces each selectably coupled with a respective one of multiple TE2 communication terminals, the TE2-type physical layer signal format of one of the multiple TE2 communication terminals being different from the TE2-type physical layer signal format of another of the multiple TE2 communication terminals.

85. (Original) The portable communication adaptor of Claim 84, further comprising multiple second interfaces each selectably coupled with a respective one of multiple communication networks, one of the multiple communication networks exchanging messages

with one of the multiple second interfaces using a first carrier access method, and another of the multiple communication networks exchanging messages with a another of the multiple second interfaces using a second carrier access method, wherein the first carrier access method is different from the second carrier access method.

86. (Original) The portable communication adaptor of Claim 85, wherein the multiple second interfaces are selectably coupled with a respective one of multiple communication networks responsive to a Quality-of Service signal.

87. (Original) The portable communication adaptor of Claim 82, wherein the address server cooperates with the first interface and the second interface to exchange the messages using one of an asynchronous service, a synchronous service, an isochronous service, a variable-rate service, and a combination thereof.

REMARKS

Claims 1-4, 37-40, and 53-87 are pending in this application.

Rejections under 35 U.S.C. 112, second paragraph

Claims 1-4 and 37-40 are rejected under 35 U.S.C. 112, second paragraph for containing language lacking proper antecedent basis.

Claims 1 and 37 have been amended to recite “mobile station manager” in place of “mobile system manager.” It is respectfully submitted that these amendments obviate the rejections of claims 1-4 and 37-40 under 35 U.S.C. 112, second paragraph.

Rejections under 35 U.S.C. 103(a)